

(U//FOUO) Atomic SIGINT Data Format (ASDF) Configuration Read Me

(U) Overview

(U//FOUO) The *ASDF Configuration Read Me* is designed to provide procedures for other organizations to configure their own XKEYSCORE servers tailored to their requirements and mission. More specific, it provides procedures for generating and forwarding ASDF data to FALLOUT, which then is forwarded to the MARINA repository.

(S) FALLOUT is a DNI metadata exploitation and integrity service which converts, validates, normalizes, classifies, and distributes DNI metadata according to algorithms and rules produced by Protocol Exploitation. FALLOUT feeds corporate metadata repositories, such as MARINA, METAWAVE, FASCIA, and MAINWAY, with full-take and selected metadata derived from collection and processing systems such as TURMOIL, WEALTHYCLUSTER 2.0, XKEYSCORE, BLACKPEARL, SCISSORS, and others.

(S) The MARINA metadata application tracks a user's browser experience, gathers contact information/content, and develops summaries of target activity. This tool offers retrieval, data aggregation, viewing, and some manipulation of specific data types collected worldwide.

(U//FOUO) Configuring XKEYSCORE for ASDF can be accomplished in three phases. First, you will address two pre-configuration requirements. Next you will configure *xks.config* for ASDF forwarding. Last, you will execute a group of set-up processes.

(U) Pre-Configuration Requirements

(U//FOUO) The Atomic SIGINT Data Format (ASDF) requires the following:

- The most recent StarProc update on each XKEYSCORE server that is processing data. Please see the Royale with Cheese Updater How To document to configure your XKEYSCORE to pull the latest StarProc updates.
- MAILORDER configured to pick up KLG MAILORDER files from the Master server in the *\$XSCORE_DATA_DIR/outputs/mailorder* directory.

(U//FOUO) Configuring *xks.config* to Generate ASDF Files

(U) Configuration for generating and forwarding ASDF can be accomplished in just five steps:

1. (U) Logon as the user `oper`.
2. (U//FOUO) At the command line from within any directory, type `vi config` and then press `Enter`. The *xks.config* file will open.
3. (U//FOUO) In the *#outputs* section of *xks.config*, set the following configurations:
 - a. `asdf_output = yes` : This enables the digester plugin.
 - b. `asdf_trigraph = KLG` : This sets the MAILORDER trigraph to correctly write out the asdf MAILORDER files.
 - c. `asdf_priority = 2` : This sets the priority in the MAILORDER file name.
4. (U//FOUO) In the *#[processes]* section of *xks.config*, set `mailorder = yes` to enable MAILORDER.
5. (U) Type `:wq!` and then press `Enter` to save and exit *xks.config*.

(U) Additional Processes

(U) In addition to editing configurations in *xks.config*, it is important to run several set-up commands.

1. (U//FOUO) At the command prompt, type `xks setup processes` and press `Enter`. Because MAILORDER is enabled in step 4 above (i.e., `mailorder = yes`), executing this command will create the `mailorder_proc` process on the Master server.
2. (U//FOUO) At the command prompt, type `xks proc start` and press `Enter`. This will ensure all of running processes pick up any configuration changes.
3. (U//FOUO) At the command prompt, type `xks setup plugins` and press `Enter`. Because The digester plugin is enabled in step 3a above (i.e., `asdf_output = yes`), executing this command will setup the `digest plugin` on the Master server.
4. (U//FOUO) At the command prompt, type `xks rsync push_config` and press `Enter`. This pushes the new `plugin_config` to the slaves, after running the step above.
5. (U//FOUO) On the Master server, from the command prompt, type `xks proc saferestart` to restart the `process_data_parent's`.